

Peruvian Phasmids in the Manu National Park

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Abstract

The article describes a five night trip to the Manu National Park in South Eastern Peru in September of 2000. Phasmids were found at three different sites within the reserve between 500 and 1000 m in primary and secondary (disturbed) rainforest. The most common stick insects encountered were similar in appearance to the genera *Ocnophiloidea* and *Pseudophasma*, with a few other larger species also found. No collections were made and therefore no formal identifications have been possible.

Key words

Phasmida, Peru, Manu, South America.

I travelled to Peru in September 2000 with a group of six other friends. As part of this trip we had booked a six-day trip with Manu Expeditions (of Michael Palin's "Full Circle" and "Andes to Amazon" fame) to explore the world heritage zone of the Manu Biosphere Reserve. There are two "easily" accessible parts of the Peruvian Rainforest open to tourists. Trips depart onto the Amazon basin itself from Iquitos in the North of the country (Figure 1) and also from around the Puerto Maldonado area into the Manu reserve further south. I had been told that the flora and fauna in the Manu area were more distinctive than around Iquitos and, as it is less visited, were less disturbed.

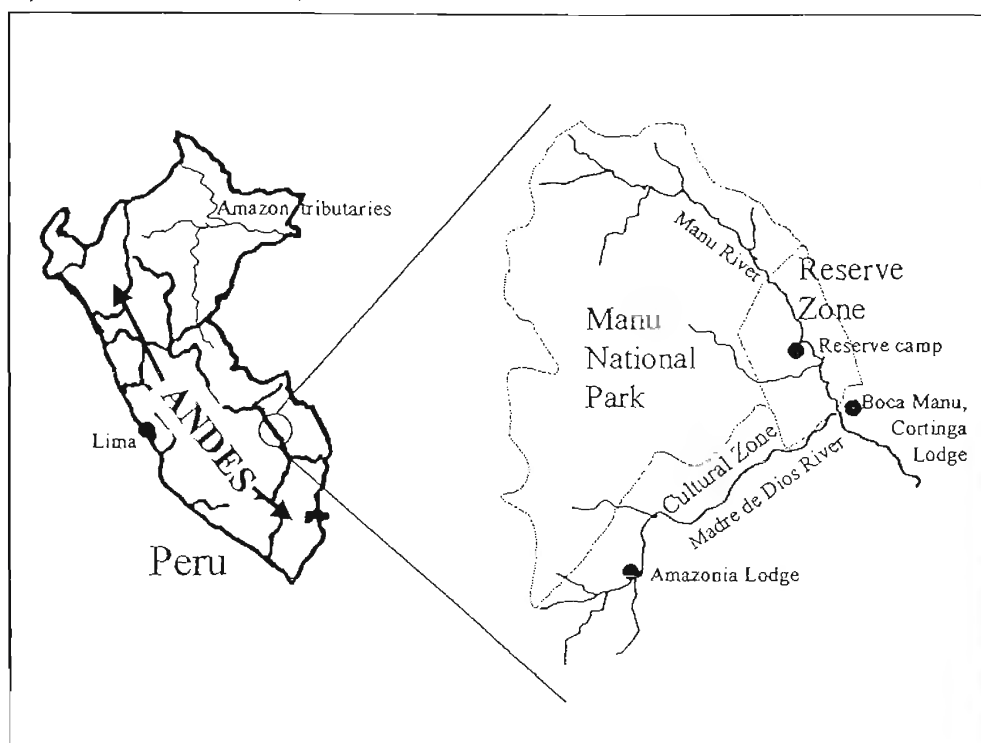


Figure 1. Map of Peru and the Manu National Park.

We travelled by minibus from the ancient Inca capital of Cusco over the Andes and down into the Manu National Park. This park covers an area the size of Wales and includes an enormous range of habitats as it spans over 3500 meters in altitude. Humans are allowed in the "Cultural Zone" of the park to help make it financially viable, but our ultimate destination was the reserved zone, accessible only by boat and free from all humans except the native tribesmen (Figure 1). We entered the park at around 3800 meters where the vegetation changes from the Puna, or high Andean grassland, to elfin forest, which is quite an open forest full of moss-covered, trees, dwarfed by the harsh mountain conditions. We were here at mid morning, so there was little chance of phasmid spotting, but I did find a

stick-mimicking grasshopper in the long “grass”.

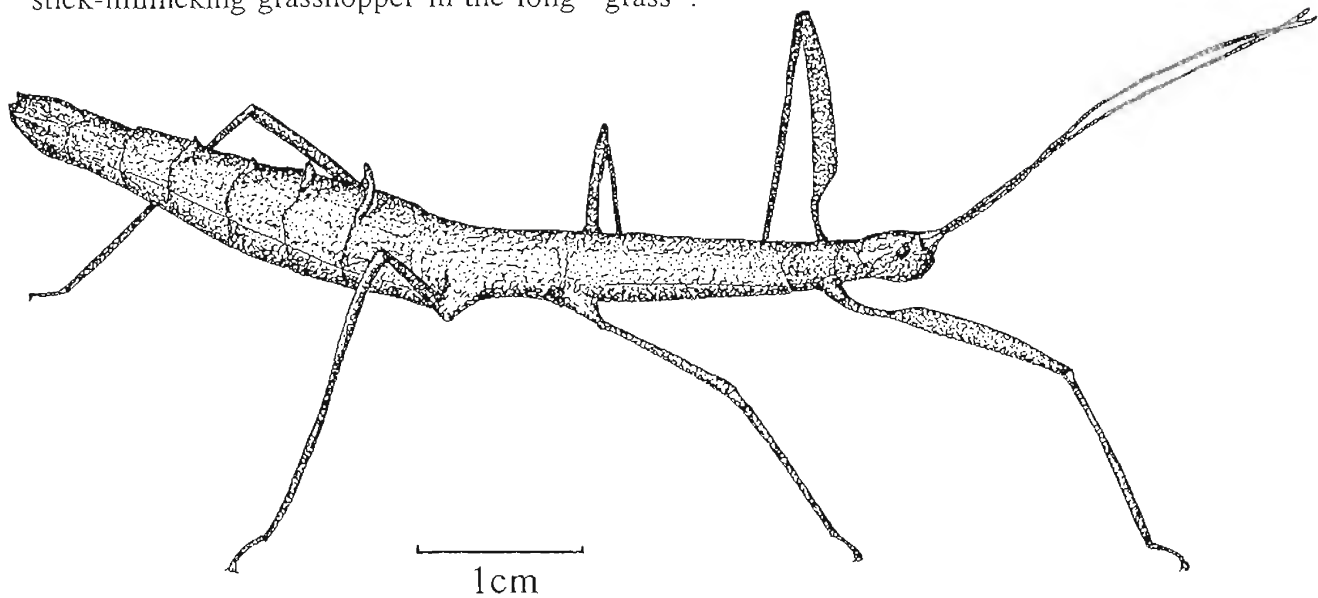


Figure 2. “*Ocnophiloidea* sp.”, female found at Amazonia Lodge.

Six hours of bumpy descent through the cloud forest into the highland rainforest brought us to La Atalaya, a little settlement at about 1000m above sea level. Just across the upper Madre de Dios river from here was the Amazonia Lodge, an old tea hacienda which was to be our first night’s lodgings.

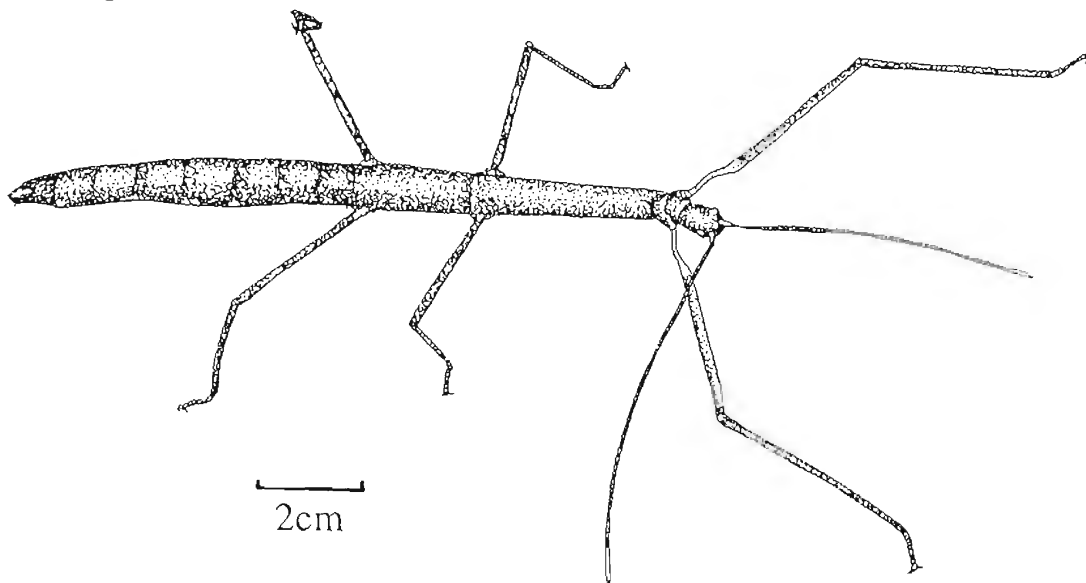


Figure 3. “*Dyme* sp.” Female found at Amazonia Lodge. The inside of the fore legs near the head was turquoise in colour, and the mouth parts were red.

Amazonia Lodge is in the Cultural Zone of the park, and consequently there were a lot of citrus trees interspersed with the young rainforest trees that were slowly reclaiming the area. Many of the plants were heavily insect-damaged, and it was only ten minutes into our first night walk that my wife spotted the first stick insect of the trip, a rather uninspiring small green nymph. However, several more sticks were soon found. The most common was

a species which looked very like a *Ocnophiloidea* sp. (Figure 2). These appeared either to be quite variable in colour, or to be of several closely related species, with some specimens being almost black with red legs and others a much lighter brown.

The largest insect we found was an adult female of what looked like a *Dyme* species. She was evenly brown, around 15cm long, with bright turquoise patches at the base of her forelegs, and a bright red mouth (Figure 3). Also we found a couple of flying species, quite *Paraphasma*- or *Pseudophasma*-like, one with brown wings and the other with bright yellow ones. We found a mating pair of the latter (?*Olyciphides* sp.?) flying around the lodge (still coupled) the following morning (Fig. 13).

The following day we descended by river to where the upper Madre de Dios river joins the river Manu at a small settlement called Boca Manu (at around 500m altitude) and our next night's accommodation in Cortinga Lodge. Here we were subjected to a violent thunderstorm which lasted most of the night and made us all very glad that we were not camping by the river!

The sudden drop in temperature caused by the storm brought the caiman out onto the sandbanks as we made our way by boat into the Reserved Zone of the park up the Manu River the following day. However, it also meant that that night we saw no phasmids at all around our camp that evening, and very few other insects.

We were staying in tents pitched in a small clearing under the forest canopy in an area of floodplain forest, which is submerged by several metres of water in the wet season. After the first night's failure, I was pessimistic about finding any phasmids at all as I assumed that their eggs would get drowned or washed away in the floods. However, the following night, the temperature had increased to around 25°C and in two hours we found a variety of stick insects.

The first was a slender male, around 10cm long, dark brown with little yellow tubercles all over his thorax. The "*Ocnophiloidea*" were the most common again, however, and ranged from very smooth to having quite extensive foliose expansions on all their legs (Figure 4); the foliose expansions on the legs and abdomen in these insects were quite variable. Again, among the nymphs we found, there was a large variation in colour and patterning. Figures 5 and 6 show two colour forms found in the Reserve Zone: dull orange and black or brown stripes with black legs (Figure 5) and pale brown with white "bird dropping" markings

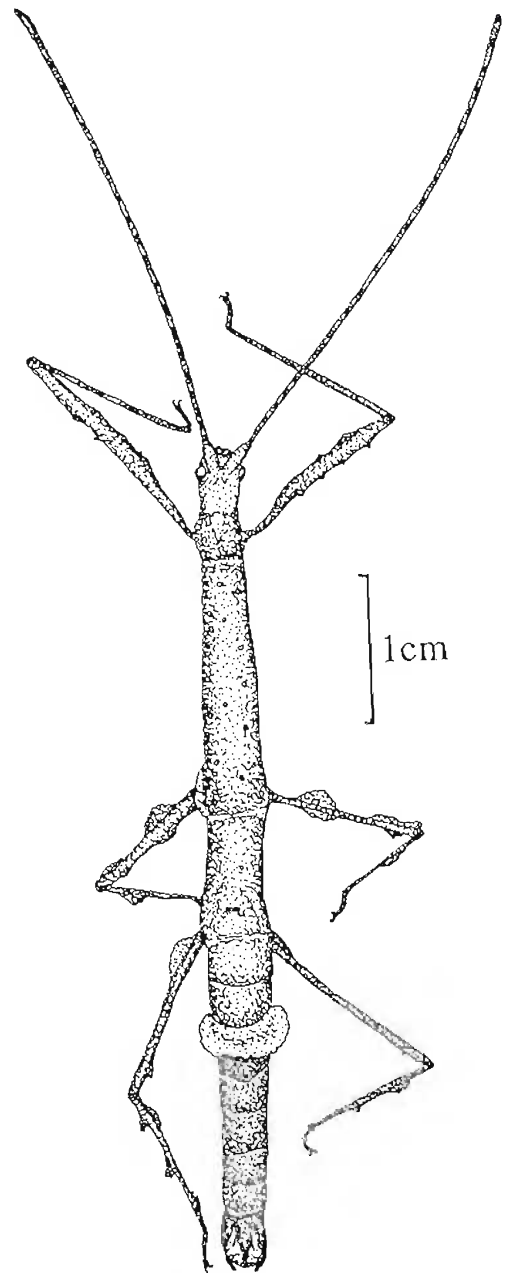
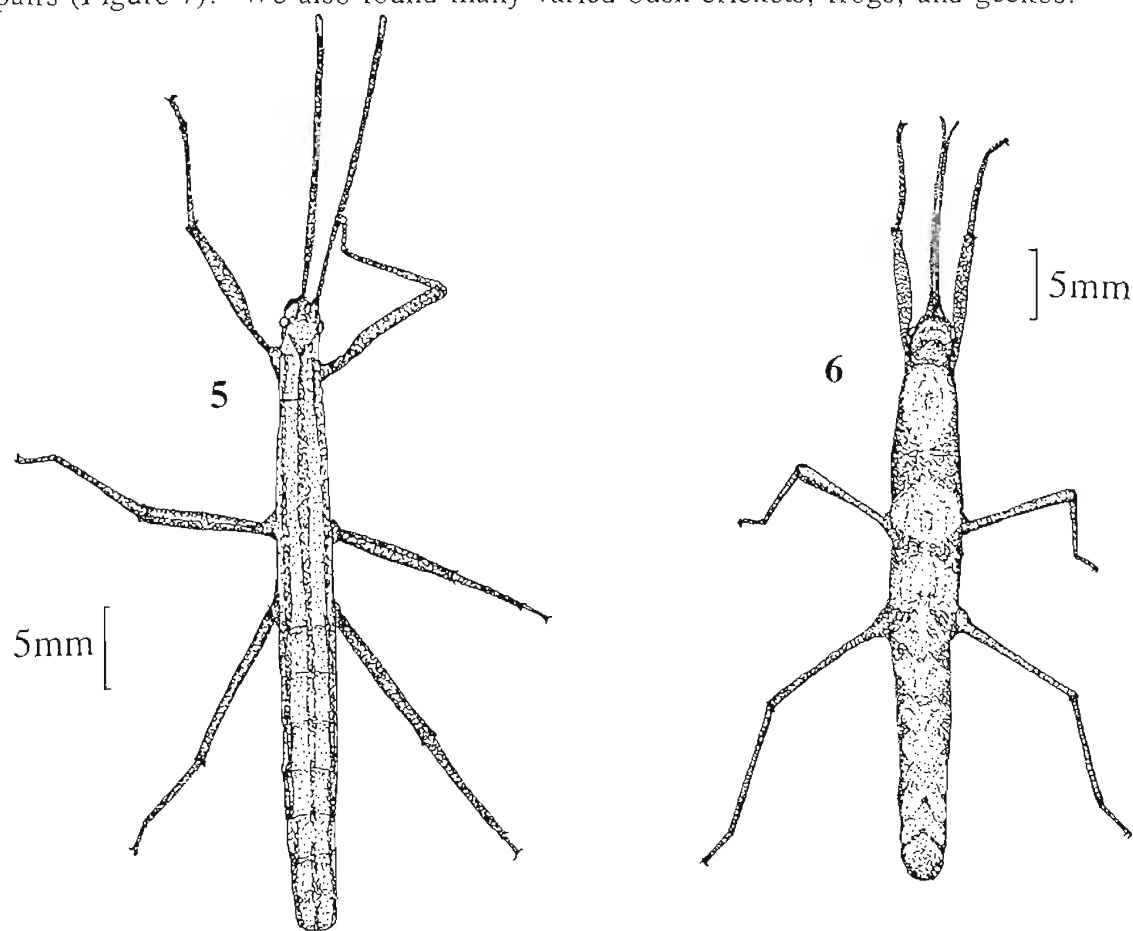


Figure 4. "*Ocnophiloidea ignavus* (Westwood)", female found within the Reserve Zone.

(Figure 6). We saw several "*Pseudophasma*" nymphs and a long brown female *Dyme*-like stick with her hind two pairs of legs bright green and sharp spines along the top of her thorax in pairs (Figure 7). We also found many varied bush crickets, frogs, and geckos.

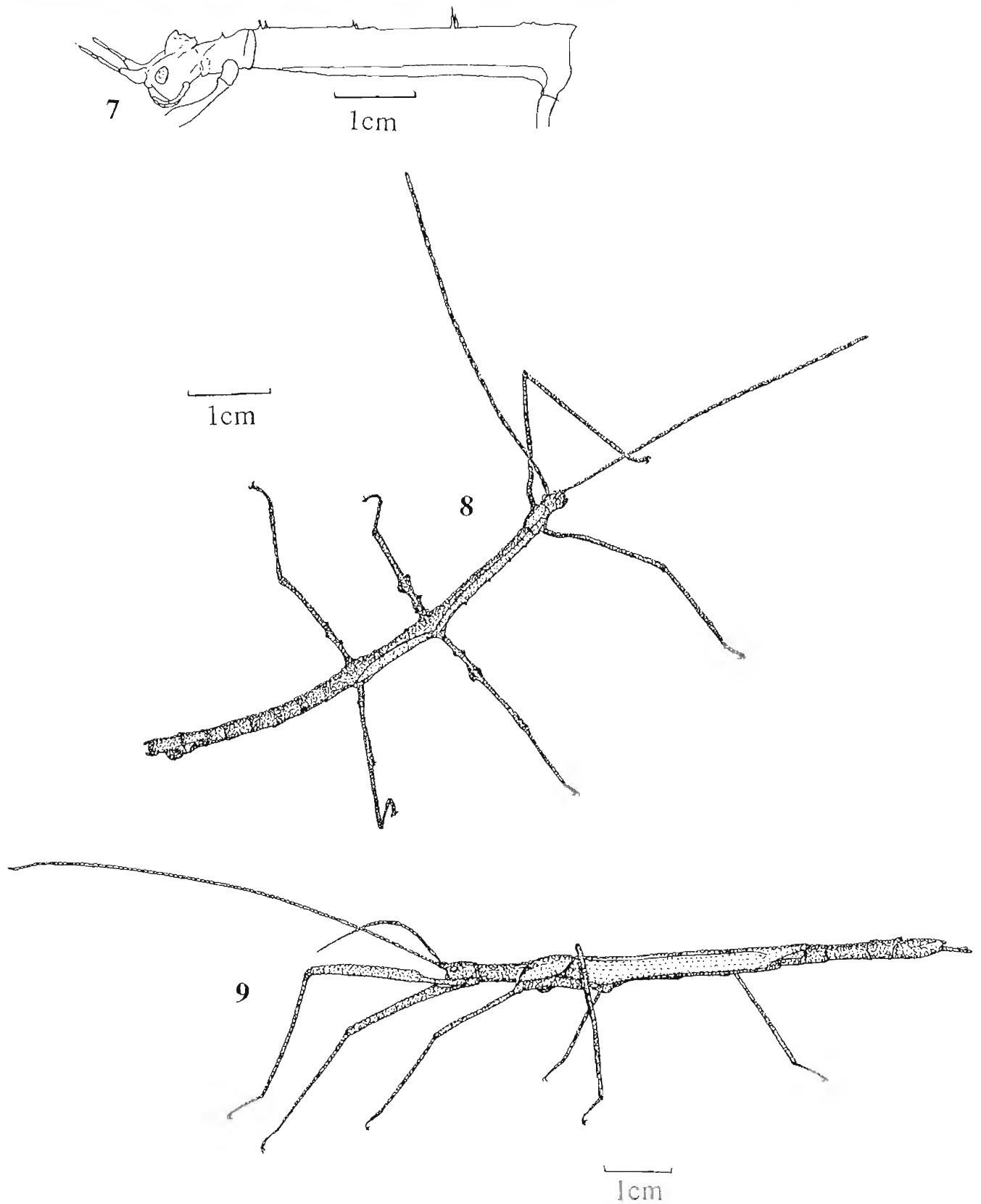


Figures 5 & 6. "*Ocnophiloidea* sp." Nymphs, showing the variability in colour form.

After spending the next day hunting for the giant otters of the region, we headed back down the Manu river to Cortinga Lodge for our last night in the forest. Having not been able to explore around the lodge on the first night, I was keen to go out one more time. Unfortunately there were no marked trails around the lodge, so we simply followed a logging path for a few hundred metres into the forest.

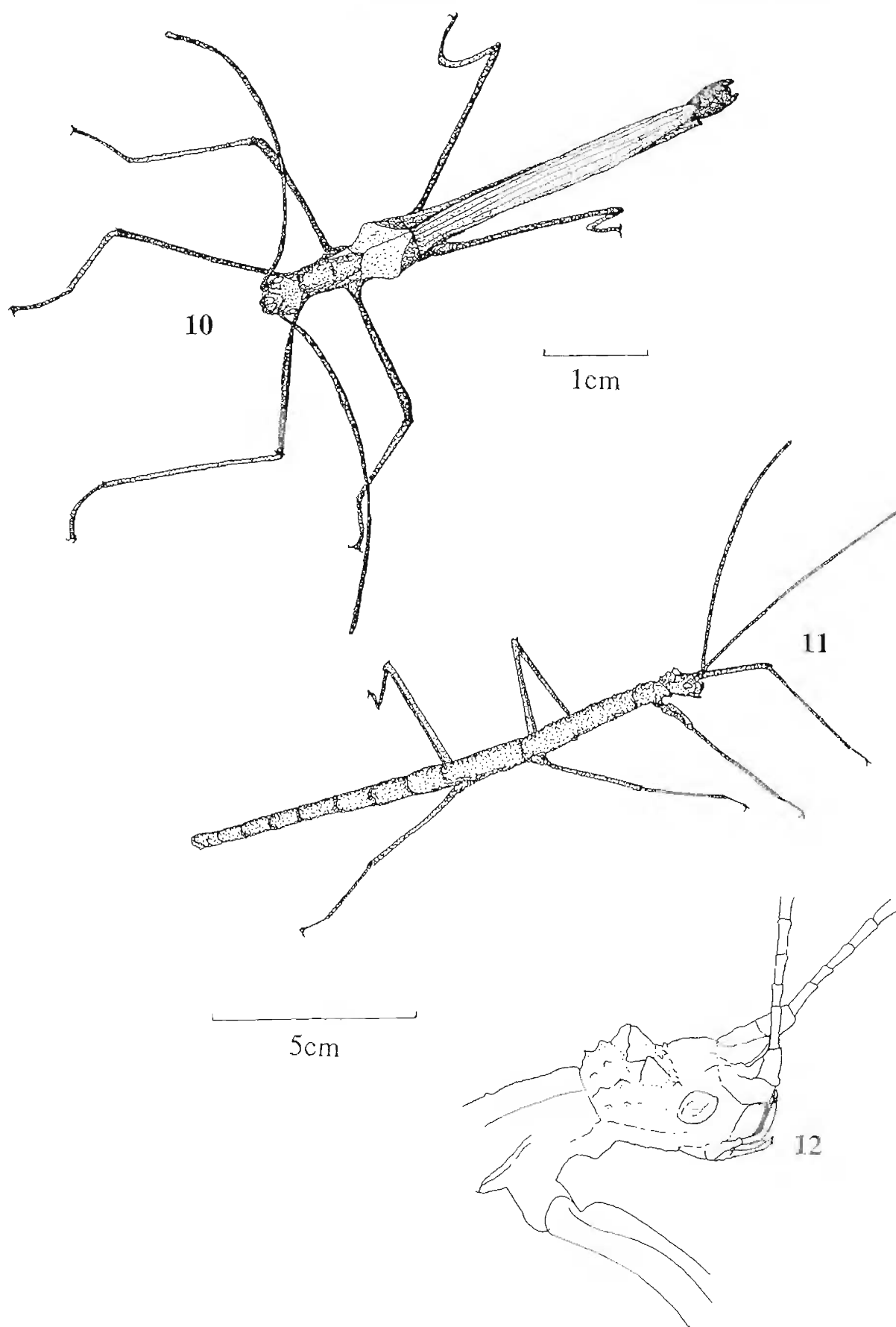
The "*Ocnophiloidea*" were the most common species again, and here they showed the greatest variety of foliose expansions on their legs and bodies. Even the males that we found (if indeed they were the same species) had little leafy expansions on their legs (Figure 8). There were a couple of "*Pseudophasma*", one with brown wings and one with bright orange wings and cream elytra (Figure 10), as well as another uniformly mid-brown flying species which looked rather like a large brown *Sipyloidea* species (?*Metriophasma* sp?, Figure 9). In addition, we found a large green female which looked rather like the brown and green one from the Manu campsite, but had two little yellow "horns" on her head and only small tubercles on her thorax (Figures 11 and 12). I found a nymph of the same species dying on a path the following day with the same coloration and the characteristic yellow horns.

Being on a guided tour in a World Heritage Zone did mean I couldn't collect any sticks or eggs to bring home. In addition, we spent the following week trudging through the snow around the shore of Lake Titicaca high in the Andes, so I doubt any livestock would have survived. The Manu National Park is certainly an excellent place to go insect hunting and



Figures 7-9.

- 7. "*Dyme* sp." Female found within the Reserve Zone.
- 8. "*Ocnophiloidea* sp." Male found at Cortinga Lodge.
- 9. "*Metriophasma* sp." Female found at Cortinga Lodge.



Figures 10-12.

10. "*Pseudophasma* sp." Found at Cortinga Lodge.

11 & 12. Large green species found at Cortinga Lodge.

I expect there are many more attractive and interesting phasmids yet to be discovered in the area.

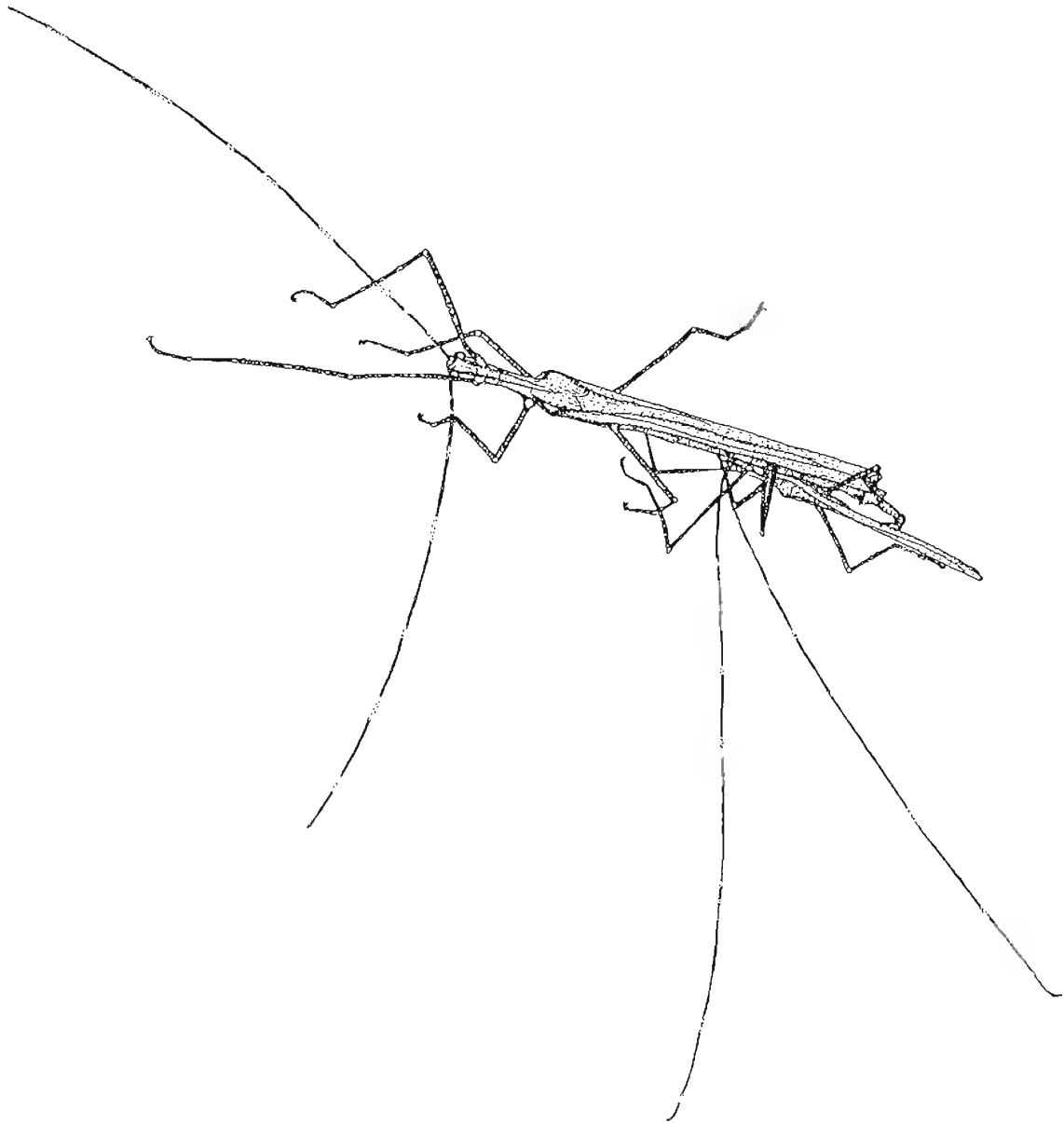


Figure 13. '*Olyciphides* sp.' Mating pair flying in the daytime around Amazonia Lodge.

I would like to thank Judith Marshall and Allan Harman for helping me to look through the collections in The Natural History Museum, London (BMNH) to try to identify some of the species from the trip. I would also like to thank our tour guide, Jessica, and my fellow travellers for being such excellent insect spotters. Please note that all names given in this article are "best guesses", given for descriptive purposes, but not necessarily taxonomically accurate. Similarly all sizes were approximated, not measured.